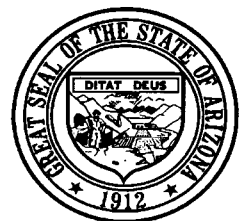


*Plan Implementation*



## **10.1 INTRODUCTION**

This chapter describes the process the Arizona Department of Water Resources (Department) will follow when implementing, determining compliance with, and enforcing compliance with the Third Management Plan requirements. These plan elements will be carried out in accordance with the Department's overall regulatory approach, which is described in the preface to Section II, Regulatory Programs. The following topics are discussed in the order listed:

- Notice of Conservation Requirements - Compliance Dates
- Variance and Administrative Review Process
- Plan Modification Procedures
- Groundwater Use Reporting Requirements
- Monitoring and Audit Procedures
- Compliance Approach

## **10.2 NOTICE OF CONSERVATION REQUIREMENTS - COMPLIANCE DATES**

Within 30 days of adoption of the Third Management Plan, the Department will mail written notice of the irrigation water duties and conservation requirements established in the plan to the persons required to comply with the requirements. A.R.S. § 45-566(B). The written notice will set forth the final irrigation water duty or conservation requirement that will become effective on January 1, 2010, and any intermediate conservation requirements that must be complied with prior to that time. Two years before the compliance date for an irrigation water duty or conservation requirement established in the Third Management Plan, the Department will give additional written notice of the requirement to the person required to comply. A.R.S. § 45-566(B).

A person who receives notice of an irrigation water duty or conservation requirement established in the Third Management Plan must begin complying with the requirement by the date specified in the notice, unless the person applies for and is granted a variance, as explained in section 10.3. A.R.S. § 45-566(C). The person must continue complying with the requirement until the effective date of any substitute irrigation water duty or conservation requirement established in the Third or Fourth Management Plans. If a person receives notice of a Third Management Plan irrigation water duty or conservation requirement that replaces an irrigation water duty or conservation requirement established for the person in the Second Management Plan, the person must continue complying with the Second Management Plan irrigation water duty or conservation requirement until the effective date of the Third Management Plan requirement.

The director may give written notice of a conservation requirement at any time to a person with a right or permit to withdraw, distribute, or use groundwater that was not in existence when the management plan was adopted. The person given written notice must comply with the conservation requirement not later than the compliance date specified in the notice, unless the person applies for and is granted a variance. A.R.S. § 45-571.01(B) and (C).

## **10.3 VARIANCE AND ADMINISTRATIVE REVIEW PROCESS**

Upon receipt of a notice of a Third Management Plan irrigation water duty or conservation requirement, a person may apply for a variance from or seek administrative review of the water duty or conservation requirement. In general, a variance gives a person additional time to comply with an irrigation water duty

or conservation requirement, while an administrative review can result in an adjustment to the requirement for that management period. Each of these processes is described below.

### **10.3.1 Variance**

If a person requires additional time to comply with a new irrigation water duty or conservation requirement, the person may apply for a variance. An application for a variance must be filed within 90 days of the date of the notice of the irrigation water duty or conservation requirement given two years prior to the compliance date for the requirement. A.R.S. § 45-574(A). The director may grant a variance for up to five years upon a showing that “compelling economic circumstances” will prevent the person from complying with the new irrigation water duty or conservation requirement by the compliance date specified in the notice. A person granted a variance must continue complying with any existing irrigation water duty or conservation requirement during the variance period, unless the director establishes a schedule of intermediate water duties or conservation requirements to be reached at specified intervals during the variance period. A.R.S. § 45-574(C).

### **10.3.2 Administrative Review**

If a person believes that an error or omission was made in calculating the person’s irrigation water duty or conservation requirement, the person may request an administrative review of the irrigation water duty or conservation requirement. If granted, an administrative review can result in a permanent adjustment to the irrigation water duty or conservation requirement. An application for administrative review must be filed within 90 days of the date of the notice of the irrigation water duty or conservation requirement given within 30 days of adoption of the management plan, if the application is based on circumstances in existence as of the date of the notice. A.R.S. § 45-575(A).

At any time during the third management period, a person may seek administrative review of the person’s irrigation water duty or conservation requirement based on a claim that “extraordinary circumstances not in existence as of the date of notice that was given thirty days after adoption of the management plan” justify revision of the irrigation water duty or conservation requirement. The director may revise the irrigation water duty or conservation requirement based on clear and convincing evidence that extraordinary circumstances not in existence as of the date of notice make it unreasonable to require compliance with the irrigation water duty or conservation requirement. A.R.S. § 45-575(B).

In determining whether extraordinary circumstances exist that render an irrigation water duty or conservation requirement unreasonable, the director will consider, among other things, whether actual conditions that came into existence after the date of notice are significantly different from those conditions in effect at the date of notice.

Examples of extraordinary circumstances may include the following situations: changes in water quality that necessitate altering water application rates for irrigation grandfathered rights; changes in technology or economics that are significantly different from the Department’s projections or assumptions; and changes in federal, state, and local laws and regulations that prevent compliance with irrigation water duties or conservation requirements.

Additionally, a municipal provider that is subject to the Non-Per Capita Conservation Program (NPCCP) may seek administrative review of a conservation requirement, other than a conservation requirement for an individual user, only if the municipal provider claims at any time that “significant circumstances that did not exist when the municipal provider’s application for the NPCCP was approved by the director” justify the modification. The director may modify the conservation requirement upon clear and convincing evidence that significant circumstances that did not exist when the application was approved by the director make it unreasonable to require compliance. A.R.S. § 45-575(C).

## **10.4 PLAN MODIFICATION PROCEDURES**

At any time after the Third Management Plan is adopted, the plan may be modified pursuant to the same public hearing and comment procedures required for adoption of the plan. A.R.S. § 45-572(A). Further, the director may modify an irrigation water duty or conservation requirement established in the plan “only if the director determines that extraordinary circumstances, errors, or mistakes justify the modification.” A.R.S. § 45-572(A).

Within 30 days of a modification of an irrigation water duty or conservation requirement, the Department must give written notice of the modification to the person required to comply with the modified requirement. The person may request a variance from or an administrative review of the modified irrigation water duty or conservation requirement within 90 days of the date of the notice. A.R.S. § 45-572(B) and (C).

## **10.5 GROUNDWATER USE REPORTING REQUIREMENTS**

The Groundwater Code (Code) contains a number of provisions that enable the Department to acquire needed information on water use. This information is used to evaluate compliance with the Code and Department rules, permits, and management plans. The water use monitoring and reporting requirements, which are summarized below, are also designed to give water users the data needed to assess their progress in attaining conservation requirements.

### **10.5.1 Water Measurement**

The Code requires persons withdrawing groundwater from non-exempt wells in Active Management Areas to measure those withdrawals using a water measuring device approved by the director. A.R.S. § 45-604. However, some small irrigation and non-irrigation users are exempt from the measuring device requirements. The Department has adopted rules requiring the use of an approved device, or a combination of devices and methods, for measuring rates and volumes of groundwater withdrawals for the calculation of the total annual volume of groundwater withdrawn. A.A.C. R12-15-901, *et seq.* Persons subject to the measuring device requirements must maintain the accuracy of the device within specific standards.

### **10.5.2 Records and Annual Reports**

The Code requires most persons who own or lease a right or permit to withdraw, receive, or use groundwater to file an Annual Water Withdrawal and Use Report with the director for each right or permit they hold. All persons required to file annual reports must maintain current and accurate records of water withdrawn, delivered, received, and used. A.R.S. § 45-632.

Persons withdrawing groundwater from exempt wells and most non-irrigation customers of cities, towns, private water companies, and irrigation districts are exempt from record keeping and reporting requirements. Persons receiving water pursuant to a grandfathered right or a groundwater withdrawal permit and persons assigned and noticed of individual user requirements must meet the record keeping and reporting requirements, although certain small right holders are exempted from those provisions.

## **10.6 MONITORING AND AUDIT PROCEDURES**

The Department has the authority to determine compliance with Code, management plan, and rule requirements. This authority is described below.

### **10.6.1 Measuring Devices**

The Department monitors compliance with the measuring device requirements, as required by A.A.C. R12-15-901, *et seq.*, through review of Annual Water Withdrawal and Use Reports, field investigations, and evaluations of energy usage. Before field visits, the Department generally contacts well owners to ask for their cooperation and presence during the inspection. Standardized procedures and equipment are used to test the accuracy of measuring devices. The Department checks a significant percentage of the wells in the Tucson Active Management Area (AMA) for accuracy each year.

### **10.6.2 Irrigation Acreage and Water Use Monitoring**

The Department monitors irrigated acreage and irrigation water use in the Tucson AMA using annual reports, crop records, energy use records, aerial photography, and satellite-based remote sensing data. These procedures are also used to determine the accuracy of annual water use reports and to detect illegal irrigation. The Department investigates any potential discrepancies or violations identified using these methods.

### **10.6.3 Annual Report Reviews and Audits**

The Department reviews all annual water withdrawal and use reports. This is the Department's primary means for determining compliance with conservation requirements, measuring requirements, and groundwater use limitations.

Each year, the Department conducts official audits of a significant number of annual reports to check the accuracy of the reports and to verify suspected problems. An audit is a detailed review by Department staff of a person's water use records. Each person audited is requested to attend the audit. Audits ensure overall compliance with the Code and the management plan for the Tucson AMA.

### **10.6.4 Inspections**

The Code allows the Department to enter property where facilities are located that are used for the withdrawal, transportation, or use of groundwater. This authority allows the Department to inspect facilities and lands subject to Code provisions and obtain data or access to records relating to the withdrawal, use, or transportation of groundwater. A.R.S. § 45-633.

The Department is generally required to give persons reasonable notice of inspections or investigations unless entry is sought solely to inspect a measuring device. Notice is not required in the rare cases in which there is reason to believe that notice would impede enforcement efforts.

## **10.7 COMPLIANCE APPROACH**

The Department has developed a compliance program approach that includes education, assistance, and flexibility.

### **10.7.1 Education and Assistance**

The Department informs water users of their conservation and reporting requirements as described in section 10.2 of this chapter. The Department also educates water users by explaining how the requirements were derived and how the user can achieve those requirements. This is done through advisory committees, detailed program descriptions contained in reports and issue papers, public presentations, the publication of this management plan, and individual meetings with interested users.

Annual flexibility account balance statements are sent to all affected users allowing them to monitor their compliance status. Irrigation grandfathered right holders who have exceeded the debit limits of their flex accounts, or who are close to exceeding them are notified of their status and given the opportunity to reduce water usage or purchase flex credits to avoid an enforcement action. However, irrigation grandfathered right holders regulated under the Historic Cropping Program may not purchase flex credits.

Financial and technical assistance is available to water users to assist them in meeting their conservation requirements. This assistance is more fully described in Chapter 9.

### **10.7.2 Determination of Compliance**

The mandatory conservation programs in the Third Management Plan are designed to achieve reductions in groundwater withdrawals and use. Consequently, the persons given notice of irrigation water duties and conservation requirements established in the plan are required to comply with those irrigation water duties and conservation requirements only in those years in which they withdraw, distribute, or receive groundwater. The following two sections describe how the Department determines compliance with conservation requirements when groundwater is used.

#### **10.7.2.1 Maximum Annual Water Allotments and Gallons Per Capita Per Day Requirements**

The Third Management Plan establishes maximum annual water allotments for irrigation grandfathered rights, turf-related facilities, dairies, and cattle feedlots. Municipal providers regulated under the Total GPCD Program and the Alternative Conservation Program are required to comply with gallons per capita per day (GPCD) requirements. The requirements are similar to maximum annual water allotments in that they limit the amount of water that may be used during a year to a predetermined amount. A person's compliance with a maximum annual water allotment or GPCD requirement is generally determined by comparing the total amount of water used by the person during the year with the amount of water allowed by the allotment or GPCD requirement. However, the use of water in excess of the allotment or GPCD requirement during a year does not necessarily mean that the person is out of compliance for the year. To account for weather variations and other factors that may result in the use of more water in some years than others, the Department determines compliance either through the operation of a flexibility account or through a three year averaging method, depending on the type of use.

Flexibility accounts are used to determine compliance for municipal providers subject to GPCD requirements, turf-related facilities, and irrigation grandfathered rights. The total water use reported by the user for the year is compared with the amount of water the user was entitled to use during the year. Generally, if the total amount of water used during the year is less than the allotment for the year, the flexibility account is credited with the difference. If the water use exceeds the allotment, the flexibility account is debited with the difference. A user is out of compliance with its allotment or GPCD requirement in any year in which its flexibility account is debited with an amount of water that causes the account balance to exceed the maximum negative balance allowed for the use.

For dairies and cattle feedlots subject to maximum annual water allotments, compliance is determined through a three year averaging method. Under this method, the user will be in compliance with its allotment for any year in which its water use exceeds its allotment if the total amount of water used during that year and the previous two years does not exceed the sum of allotments for those three years.

If an irrigation grandfathered right, turf-related facility, or municipal provider uses water during a year in an amount that causes its flexibility account to exceed its maximum negative account balance, or if a dairy or cattle feedlot uses water during a three year period in an amount that exceeds the sum of the allotments for those three years, a violation occurs, but only to the extent of the groundwater included in excess. The Department determines the amount of groundwater in the excess by a process known as "stacking."

Under the stacking process, water from all sources used by a person during a year, with certain exceptions, is counted when comparing the person's water use to the maximum annual water allotment or GPCD requirement. However, groundwater is counted last. The process of counting groundwater last is called stacking because the groundwater is added to, or stacked on top of, the non-groundwater sources. Because groundwater use is counted last, the amount of any water used by a person in excess of its allotment or GPCD requirement will be comprised, at least partially, of groundwater.

#### **10.7.2.2 Specific Conservation Measures**

Municipal providers regulated under the NPCCP are required to comply with specific conservation measures instead of GPCD requirements. The following industrial users are required to comply with conservation measures specific to their type of use instead of maximum annual water allotments: dairies regulated under the Best Management Practices Program, sand and gravel facilities, metal mines, electrical power plants, large-scale cooling facilities and new large landscape users. For these municipal providers and industrial users, compliance will be determined by ascertaining whether they implemented their specific conservation measures in the manner required by the management plan, rather than by comparing their water use to a volumetric allotment. They are out of compliance if they fail to implement the conservation measures in the required manner.

All industrial users, including those subject to maximum annual water allotments, are required to comply with the conservation measures established for All Industrial Users in section 6-202 of Chapter 6. These conservation requirements include general requirements to avoid waste and make efforts to recycle water. They also include more specific requirements relating to low water use landscaping, landscaping and water features in publicly-owned rights of way, single pass heating and cooling, and low flow plumbing fixtures. In addition to these requirements, section 6-1002 of Chapter 6 requires that all new large industrial users submit a water conservation plan to the director.

#### **10.7.3 The Enforcement Process**

When the Department's monitoring program identifies a potential violation or when third party complaints are received about the activities of another user, an investigation is conducted to obtain the facts.

An investigation may involve a field inspection by Department staff or an audit at the Department's office after notice to the potential violator. The Department may request that the individual produce relevant records for the inspection or audit. Based on the investigation, the Department will determine whether there has been a violation and, if so, what course of action to take.

Where the violation is minor and does not require corrective action, the Department may bring the compliance action to a close with an advisory letter upon discontinuance of the violation. For more serious violations where there is reason to believe a person is violating or has violated a statute, permit, rule, or management plan provision, enforcement action will be taken by the Department.

During the first and second management periods, the Department took a non-traditional approach to enforcement. Given the recent introduction of the Code and management plans, a high level of tolerance was employed. Fines were set at low levels and probationary provisions and advisory notices were widely used. Usually, for unintentional violations of management plan requirements such as GPCD limits and maximum turf or irrigation grandfathered right allotments, the Department deferred any monetary penalties. Instead, it allowed the violator to develop or expand conservation measures designed to help the violator reduce water use. The Department felt that the long-term benefits of a properly designed and implemented conservation program, tightly structured and closely monitored, would exceed the benefits of a traditional monetary penalty program.

For a management plan violation, the violator was given the following options:

- Contest the enforcement action by requesting a hearing, or
- Pay a predetermined monetary penalty, generally based on the amount of groundwater used in excess of the requirement, or
- Negotiate a mitigation program with the Department designed to develop or expand conservation programs intended to assist the violator in achieving future compliance.

The results of this enforcement strategy have been mixed. Some mitigation programs developed under this approach have been successful in increasing water use efficiency, while others have been less effective. In most cases, significant and sometimes disproportionate amounts of time and resources have been invested by both the violators and the Department.

The Third Management Plan approach to enforcement will exercise flexibility on a more limited scale. The arguments of “newness and complexity” will be less compelling in this management period. Previous violations will be considered in determining the appropriate compliance approach. In addition, the Department may consider new compliance approaches during the management period for Code and management plan violations. One possible provision would employ a groundwater replenishment option. This may involve storage of renewable water designated as nonrecoverable, as defined by A.R.S. § 45-833.01, in a volume that would adequately compensate for the violation. A related approach may allow the purchase and extinguishment of long-term storage credits to offset a violation. The result of these approaches is a penalty that compensates for a violation and results in a positive water resource activity. If a water user anticipates a violation and informs the Department of this expectation before receiving a notice of noncompliance, the director may consider this voluntary disclosure to be a mitigating factor in determining the appropriate enforcement action.

The Department may consider a more aggressive level of compensation for certain violations as part of its forthcoming “critical area strategy.”

Additional enforcement mechanisms are generally reserved for violators not amenable to the previously mentioned approaches. They include contested hearings, cease and desist orders, and civil penalties of up to \$10,000 per day for violations directly related to illegal withdrawals, transportation, or use of groundwater. A.R.S. §§ 45-634 and 45-635.

Extremely serious cases may also be referred for criminal prosecution if persons knowingly violate or refuse to comply with the Code or with a permit, rule, or order issued or adopted under the Code.